



U.S. Department
of Transportation

Federal Aviation
Administration

Memorandum

Subject: **INFORMATION:** Acceptable Means of Compliance
for the Instruments and Equipment Standards that are
required by 14 CFR Part 91, §91.205 for Part 23
Airplanes

Date: OCT 16 2000

From: Manager, Standards Office
Small Airplane Directorate, ACE-110

To: Manager, Anchorage Aircraft Certification Office, ACE-115N
Manager, Atlanta Aircraft Certification Office, ACE-115A
Manager, Boston Aircraft Certification Office, ANE-150
Manager, Brussels Aircraft Certification Staff, AEU-100
Manager, Chicago Aircraft Certification Office, ACE-115C
Manager, Denver Aircraft Certification Office, ANM-100D
Manager, Ft. Worth Airplane Certification Office, ASW-150
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Manager, Los Angeles Aircraft Certification Office, ANM-100L
Manager, New York Aircraft Certification Office, ANE-170
Manager, Seattle Aircraft Certification Office, ANM-100S
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The purpose of this memorandum is to provide clarification on instrument and equipment requirements that are required by 14 CFR Part 91, §91.205 for Part 23 airplanes. Our previous memorandum dated September 15, 2000 did not fully address the issues and is therefore rescinded.

Instruments and equipment installed to meet the requirements of Section 91.205 should meet the Technical Standard Order (TSO) or equivalent requirements. Technical Standard Order or equivalent requirements are an acceptable means of compliance for the instrument or equipment standards for the installation in Part 23 airplanes. The pertinent requirements in 14 CFR Part 23 for the basis of the above statement are as follows:

(1): Section 23.1301 Function and installation.

Each item of installed equipment must--

(a) Be of a kind and design appropriate to its intended function.

- (b) Be labeled as to its identification, function, or operating limitations, or any applicable combination of these factors;
- (c) Be installed according to limitations specified for that equipment; and
- (d) Function properly when installed.

And

(2): Section. 23.1525 Kinds of operation.

The kinds of operation authorized (e.g. VFR, IFR, day or night) and the meteorological conditions (e.g. icing) to which the operation of the airplane is limited of from which it is prohibited, must be established appropriate to the installed equipment.

For example, for IFR a gyroscopic direction indication is required by Section 91.205 so the gyroscopic direction indicator should meet the TSO-C6c or TSO-C5d or equivalent. Technical Standard Order C6d is the standard for a Direction Instrument, Magnetic (Gyroscopically Stabilized). If the gyroscopic direction indication is used for backing up the magnetic nonstabilized direction indicator for VFR in accordance with Section 23.1347, then the accuracy of displayed headings can be reduced to ± 10 degrees vice the applicable TSO requirement of ± 2 degrees. This is because only a magnetic nonstabilized direction indicator is required for VFR per Section 91.205.

If you have any other questions or need additional information, please contact Mr. Ervin Dvorak, Regulations and Policy Branch, at 816-329-4123.



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